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Application Number 10/532795 Response to Office Action dated 05/31/2007

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-3. (Cancelled)

4. (Currently Amended) A multichannel photodetector, comprising at least a reaction container, a light source unit that emits a plurality of light beams with different wavelengths along-the a same optical path so as to allow the plurality of light beams to enter the reaction container, and a photoreceptive unit that receives light beams output from an inside of the reaction container,

wherein the light source unit comprises at least a plurality of light emitting devices and a plurality of output dichroic mirrors that are different in wavelength range of a reflectible light beam and an actinometer for monitoring light amounts of the emitted light beams, the number of the plurality of output dichroic mirrors is equal to the number of the plurality of light emitting devices, the plurality of light emitting devices are arranged so that output directions of the respective light emitting devices may be are in parallel, the plurality of output dichroic mirrors are arranged so that each of the output dichroic mirrors ean reflect reflects one of light beams emitted by the plurality of light emitting devices, and light beams reflected by the respective output dichroic mirrors may pass through the same optical path in the same direction, the actinometer being disposed between the reaction container and the output dichroic mirror positioned nearest the reaction container, and

the photoreceptive unit comprises at least a plurality of photoreceptors and a plurality of photoreceptive dichroic mirrors that are different in wavelength range of a reflectible light beam, the number of the plurality of photoreceptive dichroic mirrors is equal to the number of the plurality of photoreceptors, the plurality of photoreceptors are Application Number 10/532795
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arranged so that photoreceptive surfaces of the respective photoreceptors may be in are parallel to each other, and the plurality of photoreceptive dichroic mirrors are arranged so that each of the light beams output from the inside of the reaction container may be is reflected by any one of the photoreceptive dichroic mirrors and may enter enters one of the plurality of photoreceptors, according to a wavelength of the light beam.

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- 5. (Original) The multichannel photodetector according to Claim 4, wherein the plurality of light emitting devices are different in wavelength of the emitted light beam, and are arranged in order of wavelength of the emitted light beam.
- 6. (Original) The multichannel photodetector according to Claim 4, wherein a mixture that contains at least a sample as a target of measurement and fluorochrome is added in the inside of the reaction container, and

the light beams output from the inside of the reaction container are fluorescence of the fluorochrome excited by the light beams emitted by the light source unit.